AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
J	1 | 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
0001	28-Mar-2005	43445416	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
NAVSEA INDIAN HEAD 101 STRAUSS AVE. ATTN: LEVONSON (BUDDY) WHITE LEVONSON.WHITE@NAVY.MIL INDIAN HEAD MD 20640-5035	N00174	**See Item 6**	

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		
	X	9A. AMENDMENT OF SOLICITATION NO. N00174-05-R-0014
	X	9B. DATED (SEE ITEM 11) 17-Mar-2005
		10A. MOD. OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer [ ] is extended, [X] is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning 2 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

[ ] A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

[ ] B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

[ ] C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

[ ] D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

This amendment is issued to incorporate a Revised Statement of Work. See attached Pages. The closing date remains 3:00 p.m., 18 April 2005.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) TEL: EMAIL:	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 28-Mar-2005

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

(End of Summary of Changes)

N00174-05-R-0014 REVISED STATEMENT OF WORK

Background

The Naval Surface Warfare Center at Indian Head, MD (NSWCIHD) operates a nitration plant for the production of nitrate esters (NE). A byproduct of this process is wastewater contaminated with nitrate esters. In the late 1980s pilot scale work was began to study the feasibility and safety implications of treating this wastewater with activated carbon to remove the NE. Since this study NSWCIHD has been using 55 gal drums of carbon, in series, to treat the wastewater since 1991. The activated carbon systems consist of four drums connected in series. When breakthrough is detected at the third drum, the first drum is removed and a new drum is added at the end of the train. These systems are effective in removing the NE from the wastewater, but they have several shortcomings. Foremost among these are the logistics and costs associated with handling the many drums required to treat the wastewater generated from a production run. NSWCIHD is planning a major upgrade to the nitration plant and as part of that we want to replace the existing drum train treatment systems with two centralized fixed bed systems.

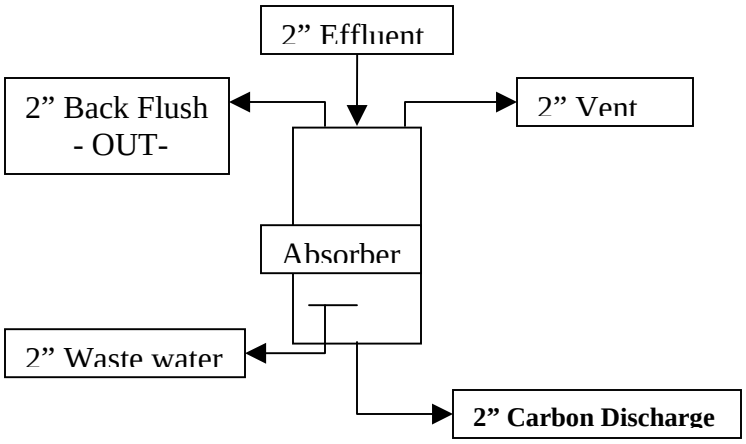
Objectives

The objective is to remove the NE from the wastewater in a timely manner. Control the loading of NE on the carbon below 45%. Minimize the material handling and labor associated with operating the systems. There shall be **two treatment systems** located separately with throughput requirements of 10 - 15 gpm. The systems should be designed to minimize and/or simplify the logistics of wetting and replacing spent carbon with virgin carbon and dewatering the spent carbon.

Requirements

To accomplish these objectives 5 absorbers will be required in combination with a feed hopper to transport GAC to absorbers. The absorber shall allow easy removal of the spent carbon to super-sack units. The Super sacks units shall allow the easy removal of the water from the spent carbon. The super sacks units with the collected dewatered spent carbon will be transported to spent carbon disposal facility.

Adsorbers - The absorbers and the internals shall be fabricated of stainless steel. The absorbers piping connections shall be flange.



Flow into the absorbers shall be designed to prevent channeling and to assure uniform flow through absorbers.

The outside diameter of the absorber could range between 30 to 33 inches with a minimum operating bed height of 24 inches. The current operating flow is 3 gpm per square foot. The absorber to have 36 inches straight side vertical height

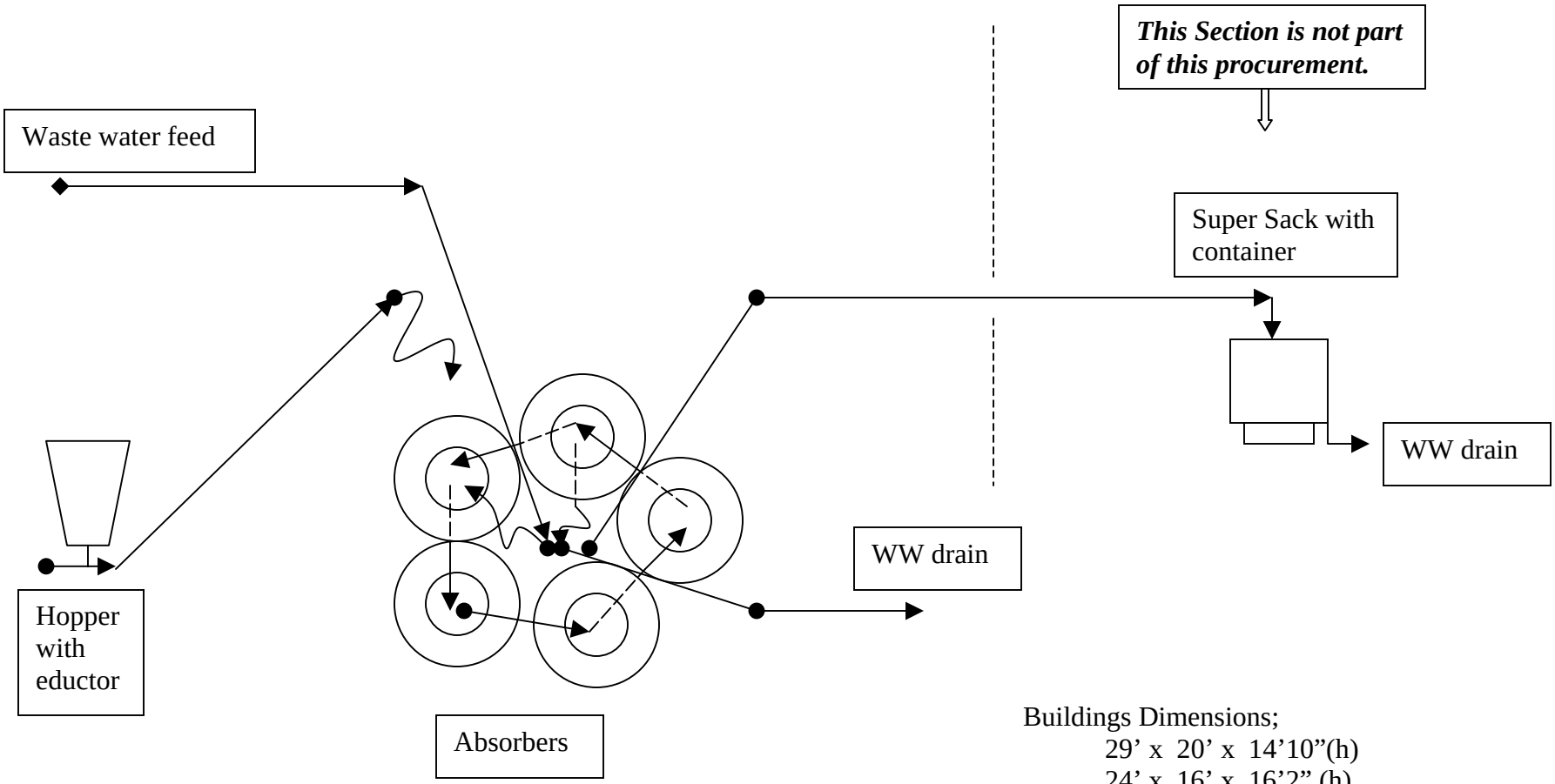
The systems shall be rated to operate at a minimum 100 psig while permitting a throughput of 10 - 15 gpm. Provide appropriate pressure/vacuum relief vents. Fabricate the absorber with top and bottom dished head. The absorber must comply with the ASME code for pressurized vessel and stamped.

The absorbers shall provide a means of easily removing and dewatering the spent carbon and adding wet virgin carbon.

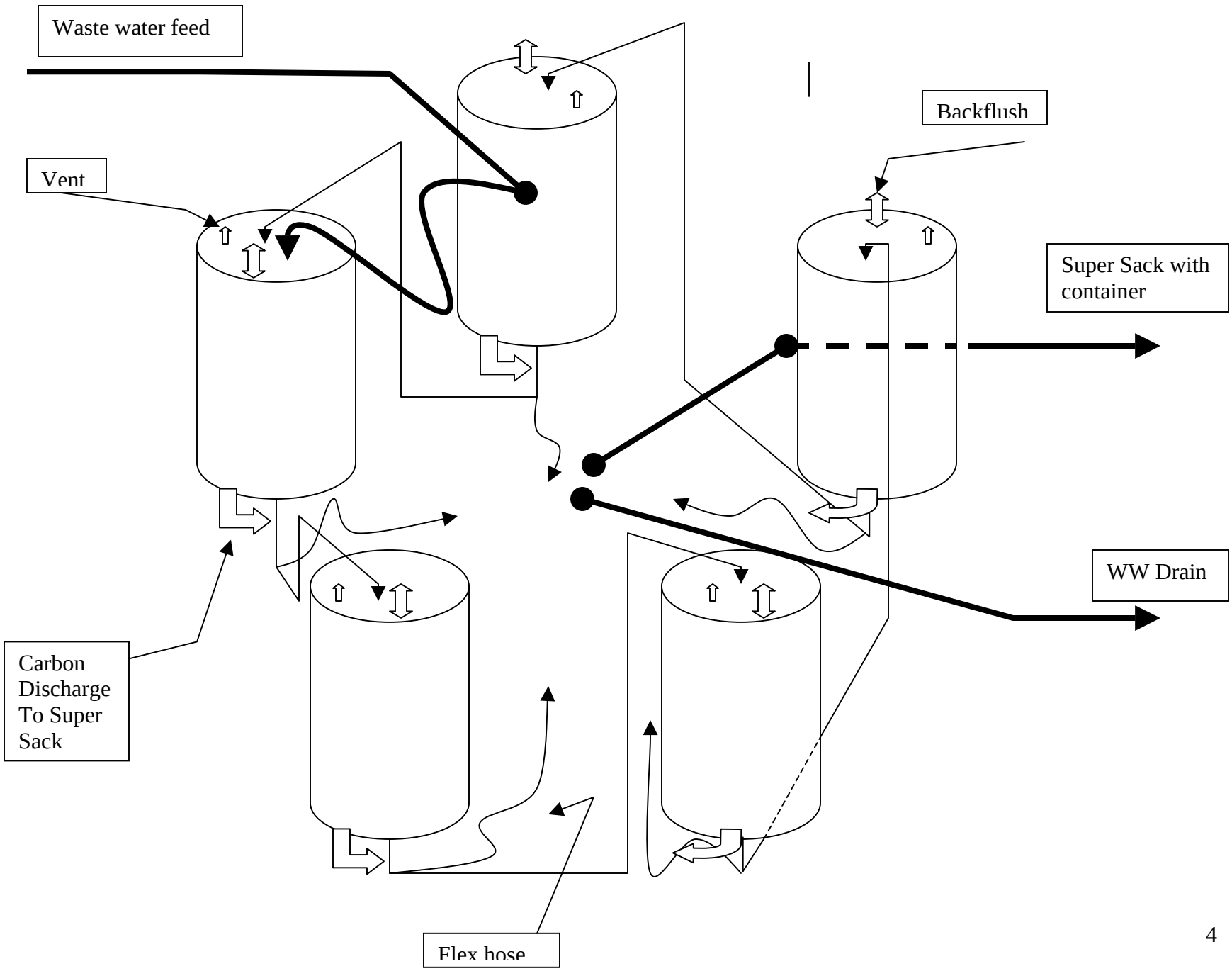
The absorbers shall be able to be lifted with a forklift. Provide lifting lugs.

Provide one (1) round bolted manway so the stainless steel internal(s) can be inspected and replaced, if necessary.

Virgin Carbon Feed (*Hopper Unit*)- Stainless Steel hopper with 2-inch eductor and 2-inch transfer hose. Hopper capacity of 1,000 lbs GAC, as minimum. The bottom cone shall allow the easy flow of the dry GAC. Since dust is a concern the hopper shall be a close top type with a manhole and 3" top connection to be used to connect a dust collector.



FLOW LAYOUT TOP VIEW


Waste water feed
Backflush
Vent
Super Sack with container
WW Drain
Carbon Discharge To Super Sack
Flex hose